

## ORDINANCE NO. O-8-07

### AN ORDINANCE OF THE MAYOR AND CITY COUNCIL TO REPEAL AND RE-ENACT CHAPTER 11 OF THE GAITHERSBURG CITY CODE ENTITLED, "FIRE SAFETY", SECTIONS 11-1 THROUGH 11-18, TO ADOPT WITH AMENDMENTS THE MONTGOMERY COUNTY FIRE SAFETY CODE AND VARIOUS RELATED NATIONAL CODES AND STANDARDS

BE IT ORDAINED by the Mayor and City Council of Gaithersburg, in public meeting assembled, that Chapter 11 of the City Code entitled "Fire Safety", is hereby repealed and re-enacted with amendments to read as follows:

#### **Chapter 11**

#### **Fire Safety**

#### **Sec. 11-1. Fire Safety Code--Adoption of County Fire Safety Code and National Fire Protection Association (NFPA) Codes and Standards.**

The Fire Safety Code of Montgomery County, Maryland, as it existed on August 1, 1996, being Chapter 22 of the Montgomery County Code, 1984 (1994 Replacement Volume), (hereinafter, the "County Code"), the 2006 Editions of the National Fire Protection Association Uniform Fire Code (NFPA 1) and Life Safety Code® (NFPA 101®), all associated NFPA codes or standards incorporated by reference, and the latest editions of certain other NFPA codes not incorporated by reference into NFPA 1 or NFPA 101®, are hereby adopted as the Fire Safety Code of the City of Gaithersburg, except as otherwise hereinafter provided in this chapter.

#### **Sec. 11-2. Scope and Definitions.**

This chapter shall apply to the construction, alteration, addition, repair, removal, demolition, use, location, occupancy, and/or maintenance of all buildings, structures, properties and their service equipment, within the City of Gaithersburg. It supersedes Ordinance No. 0-10-96, dated October 21, 1996, and all previous regulations adopting the Montgomery County Fire Safety Code for fire code. Its purpose is to adopt the 2006 editions of the Uniform Fire Code (NFPA 1) and the Life Safety Code® (NFPA 101®), and all associated NFPA codes or standards incorporated by reference and the latest editions of certain other NFPA codes not incorporated by reference into NFPA 1 or NFPA 101®, with modifications necessary to achieve uniformity and consistency with certain Maryland, Montgomery County, and City of Gaithersburg laws and ordinances, as well as certain Planning and Code Department policies and procedures. Where this ordinance differs from any other City of Gaithersburg ordinances or the State of Maryland Fire Prevention Code (COMAR 29.06.01), it does not preempt or negate any more restrictive provisions adopted or enacted by those ordinances and the more restrictive provision(s) shall apply. For the purposes of this chapter, "AHJ" shall mean authority having jurisdiction, "MCDFRS" shall mean Montgomery County Department of Fire and Rescue Services and "COMAR" shall mean the Code of Maryland Regulations.

### **Sec. 11-3. Street Names and Addresses.**

(a) The city planning commission is authorized to approve the names and addresses of improved property within the city. The commission shall not duplicate existing names or addresses, and may seek the recommendation and assistance of any local, state or federal agency to ensure the proper identification of streets and properties in the city.

(b) It shall be the responsibility of the owner of any single-family detached or attached residential structure occupied for the first time on or after January 1, 1983, to display, facing the front lot line, numerals at least three (3) inches in height designating the address assigned to the structure by the city. The owners of existing single-family detached and attached residential dwellings are requested and encouraged, but are not required, to comply with the provisions of this section. It shall be the responsibility of the owners of any existing or hereafter constructed commercial, industrial and multifamily residential structures to display, facing the front lot line, numerals at least six (6) inches in height designating the address assigned to the structure by the city. All address displays shall be posted on a contrasting background, displayed in a conspicuous place and in a manner as to be clearly visible from the nearest street. When a structure has more than one address, numerals should be used to designate the address in sequence.

### **Sec. 11-4. City Fire Marshal; Creation, Powers and Duties.**

(a) *Creation.* There is hereby created within the government of the City of Gaithersburg, Maryland, the position of City Fire Marshal. The City Fire Marshal shall be an unclassified employee who shall be qualified for the position by training and experience in fire prevention, fire safety and regulatory matters of the nature provided for in this city fire safety code.

(b) *Duties.* The City Fire Marshal shall be responsible for the enforcement and administration of the provisions of the city fire safety code (Chapter 11, Gaithersburg City Code), except that investigation of fires, explosions or incidents involving the combustion or activity of hazardous chemicals or materials shall be carried out by the Montgomery County Department of Fire and Rescue Services, Division of Fire Investigations. The city manager may appoint or designate assistants to assist the City Fire Marshal in the carrying out of his/her duties or in delegating those duties.

(c) *Powers.* The City Fire Marshal is empowered to administer the provisions of the city fire safety code (Chapter 11, Gaithersburg City Code) and perform such other duties as may be set forth in other sections of the City Code, and as may be conferred and imposed from time to time by law, regulation or directive of the city manager. The City Fire Marshal shall also be empowered to exercise the following duties within the jurisdiction of the city:

- (i) Those duties set forth in Chapter 22, section 22-6 of the Montgomery County Fire Safety Code; and
- (ii) The review and approval of plans for buildings, structures and the storage of hazardous or combustible chemicals, petroleum products or other such materials for conformance with the city fire safety code; and
- (iii) Issue permits authorized or required under the city fire safety code; and
- (iv) Inspect all buildings and structures, except lawful single-family private residential dwelling units, and all storage sites and facilities containing substantial quantities of hazardous or combustible materials for the purpose of ascertaining and

causing to be corrected any condition reasonably believed to cause fire or explosion, contribute to the spread of fire, interfere with fire fighting operations, endanger life or property, or violate the provisions of the city fire safety code or any other law, ordinance or regulation involving fire safety or fire prevention; and

- (v) Issue warnings, orders, decisions and directives relating to the enforcement of the provisions of the city fire safety code; issuance or revocation of any permit issued under the fire safety code; evacuations as hereinafter provided; and, the unlawful continuance of any unsafe condition or activity in violation of the fire safety code; and
- (vi) Issue municipal infraction citations pursuant to section 1-9 of the City Code or such misdemeanor prosecutions pursuant to section 1-7 of the City Code. In addition, the City Fire Marshal may seek those additional legal and equitable remedies provided for in section 1-11 of the City Code.
- (vii) Modify or vary provisions and requirements of the city fire safety code or other code provisions relating to fire safety or fire prevention applicable within the city, except those areas reserved to Montgomery County under section 11-4(b). A modification or variation may only be granted where an alternative is provided which achieves a comparable level of fire safety and/or prevention or where a requirement cannot physically be achieved on a specific property, building or structure.

#### **Sec. 11-5. Revocation of Permits.**

The City Fire Marshal, upon reasonable notice to a permittee, is hereby authorized to suspend or revoke any permit issued under the city fire safety code whenever in his/her judgment any violation of the conditions of the permit or violation of the provisions of the city fire safety code exists, or a hazardous or unsafe condition arises beyond the scope of the permit, or affecting a permit condition. The permit holder shall comply with the suspension or revocation order, even though an appeal is filed to the City Fire Marshal's order with the City of Gaithersburg Board of Appeals.

#### **Sec. 11-6. Evacuation.**

When, in the opinion of the City Fire Marshal, there is actual and/or potential danger to the occupants or those in the proximity of any building, structure or premises because of any violation of the fire safety code constituting a dangerous or hazardous condition, the City Fire Marshal may order the immediate evacuation of said building, structure or premises. All of the occupants so notified shall immediately leave the building, structure or premises, and persons shall not enter or reenter until authorized to do so by the City Fire Marshal. The fire marshal shall order such dangerous conditions and materials removed or remedied. Buildings or premises deemed unsafe by the City Fire Marshal for fire safety code violations or the presence of dangerous or hazardous conditions may be reopened for use by the City Fire Marshal or his/her assistants after inspection of the said building and a determination as to the safety and habitability of the building or premises.

#### **Sec. 11-7. Unlawful Continuance.**

Any person who shall refuse to leave, interfere with the evacuation of other occupants, or continue any operation after having been given an evacuation order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be deemed guilty of a municipal infraction, and shall be subject to a fine as provided in section 11-13(i).

#### **Sec. 11-8. Smoke Detection.**

Effective June 11, 2001, smoke detection devices in operable condition shall be installed and maintained in all single-family and multi-family residential dwelling(s) in accordance with the State of Maryland Fire Prevention Code and the following additional requirements:

- (1) Approved single station smoke detectors shall be installed and maintained in operable condition in the following locations:
  - (a) All bedrooms and sleeping areas; and
  - (b) Any hallway or other enclosed area in the immediate vicinity of the bedroom(s) and sleeping area(s); and
  - (c) On each level of the dwelling, including basements and cellars but not including unoccupied attics or garages.
- (2) Smoke detectors powered by the building electrical system shall have battery power as a second power source.
- (3) Unless another state or local fire prevention code or building code or similar governmental code requires detectors to be powered by the building electrical service, smoke detectors installed in order to comply with this section of the Code may have battery power as the primary power source, and a secondary source is not required.

#### **Sec. 11-9. Fire Protection Permits.**

A permit shall be obtained from the City of Gaithersburg to install or modify any fire protection system, and where otherwise required by the City of Gaithersburg Fire Code. Where a Fire Protection Permit is required, said permit shall be obtained and a copy of such shall be on the job site prior to beginning the work covered under said permit.

#### **Sec. 11-10. Inspections.**

All work for which a fire protection permit is required by this chapter shall be inspected by the City of Gaithersburg to assure compliance with this chapter. The applicant who obtained the permit for the work shall be responsible for obtaining all the required inspections.

#### **Sec. 11-11. Fire Protection System License.**

A contractor or person responsible for the installation, modification, service, or third-party inspection of any fire protection system or any portion thereof in the City of Gaithersburg must have a valid, current license from either Montgomery County or the State of Maryland for the appropriate type of fire protection system.

## **Sec. 11-12. Maintenance of Residential Sprinkler Systems.**

For buildings having residential sprinkler systems, all leases must have the following provision: "Sprinkler System. In all units equipped with fire sprinkler systems, no portion of the system may be changed or altered except by a licensed fire sprinkler contractor. Sprinkler heads shall not have any item hung from them, nor shall they be painted, covered, or obstructed in any manner. Prior to any alteration of the sprinkler system or any changes, addition, or removal of ceilings, partitions, or walls, plans must be submitted to the City of Gaithersburg.

## **Sec. 11-13. Amendments to Chapter 22 of the Montgomery County Code (the Montgomery County Fire Safety Code)**

The Montgomery County Fire Safety Code adopted by section 11-1 of the City Code is hereby amended and modified as follows:

- (a) Wherever the County Code shall provide for the collection of any fee, such fee shall be collected and disbursed by the City of Gaithersburg, Maryland.
- (b) Wherever the words "Montgomery County, Maryland" or "county" are referenced in the County Code, they shall be deemed to mean the "City of Gaithersburg, Maryland" in this Chapter 11.
- (c) The words "county executive" as those words are used in Chapter 22, with the exception of section 22-13, shall be deemed to mean the city manager or his designee.
- (d) The words "director," "director of the county department of fire and rescue services," "fire marshal," and "fire official" as used in Chapter 22 shall be deemed to mean the Fire Marshal for the City of Gaithersburg, or such person(s) designated by the city manager to act in the place of the City Fire Marshal. Any reference in any applicable building code, property maintenance code, housing or similar code adopted by or applying within the city which refers to the Montgomery County Department of Fire and Rescue Services or fire marshal shall mean the Fire Marshal for the City of Gaithersburg.
- (e) The words "department of environmental protection" and "department of permitting services" shall be deemed to mean the city manager or his designee.
- (f) The words "and any other fire department officer or county employee specifically designated by the county executive" in section 22-33(g) are hereby deleted, and in lieu thereof shall be substituted the words "and the City Fire Marshal and any designee of the city manager."
- (g) The words "Montgomery County Board of Appeals," "county board of appeals" and "board of appeals" as they are used in the Chapter 22 shall be deemed to mean the City of Gaithersburg Board of Appeals.
- (h) Whenever the words "name of governmental authority having jurisdiction" appear in section 22-39 of the County Code or in adoptive rules and regulations, they shall mean the city manager or his authorized designee.
- (i) Whenever the County Code imposes a penalty for the violation of the provisions of Chapter 22, the penalty shall be:

Criminal violations --A fine not exceeding one thousand dollars (\$1,000.00) or imprisonment for up to ninety (90) days, or both fine and imprisonment.

Municipal infraction --A penalty in an amount as set forth in the City of Gaithersburg Fee Schedule for each infraction, as provided in section 1-9(b) of the City Code.

Each day that a violation continues shall constitute a separate and independent violation and offense.

(j) In the application of section 22-97 of the County Code, after the words "three inches high," add the words "or five (5) inches in height if constructed after June 1, 1989."

#### **Sec. 11-14. Standards Adopted.**

The following standards published by the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269, are hereby adopted as part of the City Fire Code except as modified in Sections 11-15, 11-16 and 11-17:

<u>NFPA No.</u>	<u>Code or Standard</u>
1	Uniform Fire Code, 2006 Edition
42	Code for Storage of Proxylin Plastic, 2002 Edition
50A	Standard for Gaseous Hydrogen Systems at Consumer Sites, 1999 Edition
92A	Recommended Practice for Smoke Control Systems, 2000 Edition
92B	Guide for Smoke Management Systems in Malls, Atria, and Large Areas, 2002 Edition
101®	Life Safety Code®, 2006 Edition
105	Recommended Practice for the Installation of Smoke-Control Door Assemblies, 2003 Edition
130	Standard for Fixed Guideway Transit Systems, 2000 Edition
170	Standard for Fire Safety Symbols, 2002 Edition
214	Water Cooling Towers, 2000 Edition
720	Standard for the Installation of Carbon Monoxide (CO) Warning Equipment in Dwelling Units, 2005 Edition
850	Electric Generating Plants, 2000 Edition

**Sec. 11-15. Amendments and Modifications to the Uniform Fire Code (NFPA 1).**

The *Uniform Fire Code*, 2006 Edition, is modified as follows:

- (1) *NFPA 1, 1.8, 1.9, 1.10, and 1.11.3.* Delete.
- (2) *NFPA 1, 1.12.20.* Change the word “shall” to “may”.
- (3) *NFPA 1, 2.2.* Delete the referenced publication NFPA 5000, Building Construction and Safety Code, 2006 edition. Wherever NFPA 5000 is referenced, other than for extracted text, substitute the “City of Gaithersburg Building Code”.
- (4) *NFPA 1, 3.3.165.6.* Delete the phrase “more than 3 but”.
- (5) *NFPA 1, 3.3.165.7 and 6.1.4.1.* Delete the phrase “four or more”.
- (6) *NFPA 1, 3.3.165.19.* Replace the word “three” with “five” and delete the phrase “, if any, accommodated in rented rooms”.
- (7) *NFPA 1, 3.3.165.22 and 6.1.9.1.* Replace the word “four” with “six”.
- (8) *NFPA 1, 10.1.2.* Add “except as amended by COMAR 29.06.01.07, COMAR 29.06.01.08 and the City of Gaithersburg Fire Code.”
- (9) *NFPA 1, 10.14.1, Table 10.14.1 and 10.14.9.* Delete the text and replace with the following:  
“10.14.1 Combustible vegetation, including natural cut Christmas trees shall be in accordance with COMAR 29.06.06 and the City of Gaithersburg Fire Code.”
- (10) *NFPA 1, 11.1.7.3.* Add new subsection 11.1.7.3 to read as follows:  
“11.1.7.3 Doors leading into electrical control panel rooms shall be marked with a legible sign stating ‘ELECTRIC ROOM’ or similar approved wording. The disconnecting means for each service, feeder or branch circuit originating on a switchboard or panelboard shall be legibly and durably marked to indicate its purpose unless such purpose is clearly evident.”
- (11) *NFPA 1, 13.2.2.2.* Delete the text and replace with the following:  
“13.2.2.2 New buildings shall have standpipe systems installed where required by the City of Gaithersburg Building Code or the City of Gaithersburg Fire Code.”
- (12) *NFPA 1, 13.3.2.24.2.* Add the following exception:  
“Exception: Existing Apartment Buildings.”

- (13) *NFPA 1, 18.1.1.1 and 18.1.1.2.* Replace the phrase “fire department” with “City of Gaithersburg”.
- (14) *NFPA 1, 18.2.2.1.* Delete the text and replace with the following:  
“18.2.2.1 Access Boxes. All occupancies shall provide an approved access box. The size, contents and location of the access box shall be determined by Montgomery County Department of Fire & Rescue Service (MCDFRS), in cooperation with the occupancy owner or management.  
Exception 1: One- and two-family dwellings.  
Exception 2: Multifamily buildings having no lockable doors other than those to individual dwelling units.  
Exception 3: Occupancies which provide 24-hour on-site staffing with access to all areas of the building or complex. At least one person shall staff a fixed location proximate to the main building or complex entrance to provide ready access for the fire department.  
Exception 4: Multiple occupancies within a single structure and multiple buildings within a residential building complex shall be permitted to have a single access box where permitted by MCDFRS.”
- (15) *NFPA 1, 18.2.3.1.3.* Amend to read “The requirements of 18.2.3.1 through 18.2.3.2.1 shall be permitted to be modified by the AHJ.”
- (16) *NFPA 1, 20.3.3.1.1.* Delete the phrase “more than 3 but”.
- (17) *NFPA 1, 20.3.3.2.3.4.1.* Add the following exception:  
“Exception: Day-care homes.”
- (18) *NFPA 1, 20.3.3.2.3.4.5.* Add the following exception:  
“Exception: Day-care homes with not more than three clients for overnight lodging.”
- (19) *NFPA 1, 25.2.2.1.* Add “or other approved testing standard approved by the State Fire Marshal.”
- (20) *NFPA 1, 42.2.7.5.1.* Add a second sentence to read as follows: “Such facilities shall comply with the State of Maryland Fire Prevention Code (COMAR 29.06.01)”.
- (21) *NFPA 1, 50.2.1.10.* Add new subsection 50.2.1.10 to read as follows:  
“50.2.1.10 Commercial outdoor cooking operations shall comply with the State of Maryland Fire Prevention Code (COMAR 29.06.01).”
- (22) *NFPA 1, 65.1.* Add the following: “Explosives, Fireworks and Model Rocketry shall comply with this chapter and with the State of Maryland Fire Prevention Code (COMAR 29.06.01).”

**Sec. 11-16. Amendments and Modifications to the NFPA Codes Governing Construction.**



The *Code for Motor Fuel Dispensing Facilities and Repair Garages* (NFPA 30A), 2003 edition, the *Standard For Fire Doors and Fire Windows* (NFPA 80), 1999 edition, the *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations* (NFPA 96), 2004 edition, and the *Life Safety Code®* (NFPA 101®), 2006 edition, are modified as follows:

- (1) *NFPA 30A, 7.3.6.1 and 7.3.6.3.* Add the following exception:  
“Exception: In buildings protected throughout by automatic sprinkler protection, separation shall consist of assemblies having a fire resistance rating of not less than one hour.”
- (2) *NFPA 80, 1-10.1.* Add the following: “Release of fire doors and shutters shall not be solely by fusible link, and shall be activated by one or more of the following methods:
  - (a) Approved local smoke detection at the protected opening.
  - (b) Approved area smoke detection per NFPA 72
  - (c) Full automatic sprinkler protection per NFPA 13.”
- (3) *NFPA 96, 1.1.1.* Add the following exception:  
“Exception: In day-care centers and business occupancies doing food warming only, Home Economics classrooms in Educational Occupancies, or in existing structures that were originally constructed as single family dwellings and have been converted to Lodging or Rooming Houses or small Board and Care facilities, protection shall consist of the following:
  - (a) A listed and approved recirculating residential ventilation hood with range top extinguishing system installed in accordance with the manufacturer’s specifications
  - (b) For residential ranges with recirculating ventilation hoods in buildings equipped with approved automatic sprinkler protection throughout, the sprinkler system may be considered to provide surface protection.”
- (4) *NFPA 101, General.* Delete all references to NFPA 5000, Building Construction and Safety Code, and substitute “the City of Gaithersburg Building Code.”
- (5) *NFPA 101, 1.4.4.* Add new subsection 1.4.4 to read as follows:  
“1.4.4 The use of NFPA 101A to justify equivalency concepts is not permitted in new construction.”
- (6) *NFPA 101, 3.3.52.3.* Add new subsection 3.3.52.3 to read as follows:  
“3.3.52.3 Bulkhead Door. A type of door assembly covering an opening in the ground providing direct access to a basement, the floor of which is not more than 8 feet below ground level. A Bulkhead Door consists of a single rigid leaf or two overlapping rigid leaves or covers which need to be pushed or lifted upwards in order to be opened. A person, after opening the door, can walk up a series of steps to escape to the outside.”
- (7) *NFPA 101, 3.3.122.1.* Delete the phrase “more than three, but”.
- (8) *NFPA 101, 3.3.168.4.* Delete the phrase “four or more”.

- (9) *NFPA 101, 3.3.168.12*. After the phrase “or portion thereof” insert “that does not qualify as one- and two-family dwelling”.
- (10) *NFPA 101, 4.8.2.4*. Add new subsection 4.8.2.4 to read as follows:  
“4.8.2.4 Emergency plans shall be maintained in a location approved by the City Fire Marshal.”
- (11) *NFPA 101, 6.1.4.1*. Delete the phrase “four or more”.
- (12) *NFPA 101, 6.1.9.1*. After the phrase “or portion thereof” insert “that does not qualify as one- and two-family dwelling”.
- (13) *NFPA 101, 7.2.3.9.2(3)(b)*. Delete.
- (14) *NFPA 101, Table 7.3.1.2*. Under “Business Use” add “New Business Occupancy shell space shall be calculated at 65 ft<sup>2</sup> (6.0 m<sup>2</sup>) per person.”
- (15) *NFPA 101, 7.5.1.3.1.1*. Add new subsection 7.5.1.3.1.1 to read:  
“7.5.1.3.1.1 In non-sprinklered existing buildings, parallel paths of travel shall be considered remote if not less than 40 feet apart, or separated by assemblies having at least a 1-hour fire resistance rating with minimum 20-minute rated opening protectives therein. In fully sprinklered existing buildings, paths of travel shall be considered remote if not less than 30 feet apart, or separated by smoke-resistant assemblies with self-closing opening protectives therein. These minimum separation requirements shall not supersede minimum separation of exits or doors as required by 7.5.1.3.2.”
- (16) *NFPA 101, 7.9.1.2*. In the first sentence, replace the word “only” with the phrase “but not limited to”.
- (17) *NFPA 101, 7.10.8.3.2*. Add the following: “When located at a door, the sign shall be visible with the door in any position, or if the sign is located on the door, the door shall be self-closing.”
- (18) *NFPA 101, 7.12.1(4)*. Add item (4) to read as follows:  
“(4) In special purpose industrial occupancies, spaces not subject to human occupancy due to the presence of machinery or equipment shall be permitted to have 100% of the exits discharge through a level of exit discharge.”
- (19) *NFPA 101, 8.6.6(3)*. Add the following: “Buildings wherein the communicating space(s) is (are) provided with automatic smoke detection and alarm in accordance with NFPA 72 will be considered to satisfy the requirements of ‘readily obvious’.”
- (20) *NFPA 101, 8.6.7(6)(b)*. Delete all text after the word “are” and replace with “located at the annunciator panel or in the Fire Control Room.”

(21) *NFPA 101, 9.1.5.* Add new subsection 9.1.5 to read as follows:

“9.1.5 All newly constructed below-ground floors of a building, all floors in buildings greater than 25,000 square feet per floor, and all floors of buildings greater than 3 stories in height of Type I and Type II construction shall meet minimum emergency radio communication system performance criteria adopted by Montgomery County. Proof that minimum performance criteria are met shall be provided in writing to the Fire Chief of MCDFRS.

(1) System performance testing shall be performed in accordance with technical standards for systems and testing personnel established by Montgomery County.

(2) Compliance testing shall be performed at the time of occupancy and annually thereafter.

(3) Field testing may be performed upon reasonable notification of the owner or occupant by any authorized fire and rescue personnel.

Exception: The requirements of this section shall not apply to areas within an individual dwelling unit.”

(22) *NFPA 101, 9.6.1.6.* Add the following: “When a property owner or the owner’s agent cannot be contacted to establish a fire watch, the MCDFRS at their discretion may provide the fire watch and charge the property owner the inspection overtime rate per person per hour.”

(23) *NFPA 101, 9.6.2.9.2.* At the end of the sentence, add the phrase “and have secondary battery back-up power”.

(24) *NFPA 101, 9.6.2.11.* Add new subsection 9.6.2.11 to read as follows:

“9.6.2.11 Carbon Monoxide Alarms. In new residential occupancies, carbon monoxide alarms or detectors shall be installed in accordance with Chapter 5 of NFPA 720 in any dwelling unit with an attached garage or containing a fuel-burning appliance or fireplace.”

(25) *NFPA 101, 9.6.3.2.1.* Delete the word “lobby,”.

(26) *NFPA 101, 9.6.3.3.* Delete all text after the word “delay” and replace with “to a listed central station in accordance with 9.6.4.”

(27) *NFPA 101, 9.6.3.4.* At the end of the sentence, add the phrase “and only when the initial fire alarm signal is automatically transmitted without delay to a listed central station in accordance with 9.6.4.”

(28) *NFPA 101, 9.6.3.9.* Add the following: “New systems having voice notification shall be by automatic, pre-recorded announcement in accordance with Section 9.6. Live voice as the sole means of notification method is prohibited.”

(29) *NFPA 101, 9.6.4.2.* Delete all text after the word “automatically” and replace with “to a listed central station.”

(30) *NFPA 101, 9.6.4.3.* Delete.

(31) *NFPA 101, 9.6.5.2(3).* Add the following exception:

“Exception to (3): Manual fire alarm initiation shall not activate floor- or zone-dependent smoke control systems.”

(32) *NFPA 101, 9.7.1.1.1.* Add new subsection 9.7.1.1.1 to read as follows:

“9.7.1.1.1 For new ceiling installations, drop-out ceilings as referenced in NFPA 13, Subsection 8.14.13 shall be prohibited.”

(33) *NFPA 101, 9.7.1.2.* Delete the second sentence and replace with the following: “The sprinkler piping shall be valved with the domestic water system. Any and all work shall be performed only by a licensed sprinkler contractor.”

(34) *NFPA 101, 9.7.2.2.* Delete all text and replace with the following: “Where a supervised automatic sprinkler system is required by another section of this *Code*, waterflow alarms must be automatically transmitted to a listed central station.”

(35) *NFPA 101, 9.7.3.1.* Delete all text and replace with the following: “Where water as an extinguishing agent is not compatible with the fire hazard or is prohibited by law, statute or ordinance, the affected area shall be equipped with an approved automatic fire suppression system utilizing a suppression agent that is compatible with the fire hazard. Automatic fire-extinguishing systems installed as an alternative to required automatic sprinkler systems must be approved by the authority having jurisdiction. All such systems shall be installed in accordance with the appropriate standard as determined in Table 9.7.3.1. Halon 1301 systems shall not be installed as required protection in accordance with state and/or local building or fire codes due to the environmental impact of discharge testing, the lack of adequate alternative test methods, and availability of alternative agents.”

(36) *NFPA 101, 9.7.6.1.* Add the following: “When a property owner or the owner’s agent cannot be contacted to establish a fire watch, the MCDFRS at their discretion may provide the fire watch and charge the property owner the inspection overtime rate per person per hour.”

(37) *NFPA 101, 11.8.3.1.1.* Add new subsection 11.8.3.1.1 to read as follows:

“11.8.3.1.1 In buildings having staged evacuation, the voice fire alarm system shall send a predetermined message to the floor where the fire alarm originated, to the floor immediately below and to the floor immediately above, providing information and directions to the occupants. Any subsequent alarm(s) on other than the initial fire floor must initiate the voice notification as described above. The voice notification shall be designed to be heard clearly by all occupants within the designated portions thereof as required by Section 9.6, but it shall not sound automatically in elevator cars and enclosed exit stairways. Communicating levels shall be considered one floor/fire area for the audible and visual fire alarm signals.”

(38) *NFPA 101, 11.8.5(6)*. Add the following: “and remote starting”.

(39) *NFPA 101, 11.8.5(8)*. Add the following: “and remote starting only.”

(40) *NFPA 101, 11.11.2.1*. Add the following: “or other approved testing standard approved by the State Fire Marshal.”

(41) *NFPA 101, 12.2.2.2.4*. Delete.

(42) *NFPA 101, 12.7.7.3.1 and 13.7.7.3.1*. Add new subsections 12.7.7.3.1 and 13.7.7.3.1 to read:

“The employees or attendants of assembly occupancies shall ensure that the following measures are taken:

- (1) It is the duty of the individual in charge to call the attention of those present, immediately before the beginning of the proceedings for which the people are assembled, to the number and location of the exits, and to state that the doors to all exits are unlocked. Before making the announcement, it is the duty of the individual to make an actual inspection to verify that the doors are unlocked and the means of egress are free of obstructions, and to correct any deficiencies found.
- (2) It is the duty of the individual in charge to call the attention of everyone present at the proceedings to the exits by displaying or announcing the following: "Notice. For your own safety, look for your nearest exit. In case of emergency, walk, do not run, to that exit."
- (3) The requirement for calling the attention of everyone present at the proceedings to the exits is complied with by one or more of the following methods:
  - (a) Oral announcement of the notices in this section at the beginning of the proceedings; or
  - (b) Showing the notices in this section on the viewing screen where the motion pictures are shown; or
  - (c) Printing the notices in this section in bold type letters not less than ¼ inch in height on the back of programs for the proceedings. Nothing but the notice shall be placed on the back of the program; or
  - (d) Having a fixed sign or signs displaying the notices in this section printed in letters of a size and clearness that can be easily read from each point in the assembly room.”

(43) *NFPA 101, 14.2.11.1.1(1)*. After the word “tools”, insert the phrase “keys, special knowledge, or excessive force”.

(44) *NFPA 101, 16.1.1.6 and 17.1.1.6*. Add new subsections 16.1.1.6 and 17.1.1.6 to read as follows:

“Day-care centers providing care for school age children before and/or after school hours in a building which is in legal use as a public or private school are not required to meet the provisions of this chapter, but shall meet the provisions for educational occupancies.”

- (45) *NFPA 101, 16.2.11.1.1(3) & 17.2.11.1.1(3)*. Add the following exception:  
“Exception to (3): For windows at grade, the minimum net clear opening shall be permitted to be 5.0 ft<sup>2</sup>.”
- (46) *NFPA 101, 16.3.4.5(1) and 17.3.4.5(1)*. Add the following exception:  
“Exception to (1): In buildings equipped with a selective evacuation fire alarm system, smoke detection at stairwell doors shall only be required at locations that would activate the alarm in the day-care center.”
- (47) *NFPA 101, 16.3.5.4*. Add new subsection 16.3.5.4 to read as follows:  
“16.3.5.4 Buildings containing new day-care centers above or below the level(s) of exit discharge shall be protected throughout with automatic sprinkler protection installed in accordance with section 9.7.”
- (48) *NFPA 101, 16.6.1.1.2 and 17.6.1.1.2*. Delete the phrase “more than three, but”.
- (49) *NFPA 101, 16.6.1.4.1.1 and 17.6.1.4.1.1*. Delete the phrase “more than three, but”, change “seven” to “nine” and after the existing text add “Where 3 or more clients, and up to a maximum of 4 clients incapable of self-preservation are being cared for, a minimum of 2 staff personnel shall be present at all times.”
- (50) *NFPA 101, 16.6.1.4.1.2 and 17.6.1.4.1.2*. Change “7” to “9”.
- (51) *NFPA 101, 16.6.1.7.1 and 17.6.1.7.1*, delete existing wording and replace with the following:  
“In family day-care homes, a day-care provider's own children under the age of two years shall be counted as clients served and the following shall apply:  
(1) At any given time, a day-care provider may not care for more than eight clients, of whom no more than four may be under the age of two years; and  
(2) An adult to child ratio of at least one adult to every two children under the age of two years shall be maintained at all times.”
- (52) *NFPA 101, 16.6.2.1 and 17.6.2.1*. Add the following: “Bulkhead doors shall not be permitted to serve as primary means of escape.”
- (53) *NFPA 101, 16.6.2.2 (Reserved) and 17.6.2.2 (Reserved)*. Insert the following:  
“Sliding door: For family day-care homes, a sliding door used as a required means of egress shall comply with the following conditions:  
(1) The sliding door shall have not more than one, easily operated, locking device that does not require special knowledge, effort, or tools to operate;  
(2) There may not be draperies, screens, or storm doors that could impede egress;  
(3) The sill or track height may not exceed 1/2 inch above the interior finish floor;

- (4) The surface onto which exit is made shall be an all weather surface such as a deck, patio, or sidewalk;
- (5) The floor level outside the door may be one step lower than the inside, but not more than 8 inches lower;
- (6) The sliding door shall open to a clear open width of at least 28 inches;
- (7) Before day-care use each day, the sliding door shall be unlocked and tested to the full required width to be sure it is operating properly, and the door shall be nonbinding and slide easily; and
- (8) During periods of snow or freezing rain, door tracks shall be cleared out and the door opened periodically throughout the day in order to ensure proper operation.”

(54) *NFPA 101, 16.6.2.3 (Reserved) and 17.6.2.3 (Reserved)*. Insert the following:

“Special means of escape requirements. For family day-care homes, deadbolt locks shall be provided with approved interior latches, or these locks shall be of a captured key design from which the key cannot be removed from the interior side of the lock when the lock is in the locked position. These locks shall be unlocked at all times when the home is occupied for the purpose of family day care.

Exception: A double-keyed dead-bolt lock may be used on the secondary means of escape if the key is readily accessible and the lock is unlocked when the home is occupied for family day care.”

(55) *NFPA 101, 16.7.1.1 and 17.7.1.1*. Add new subsections 16.7.1.1 and 17.7.1.1 to read as follows:

“A written prearranged plan of escape in case of fire or other emergency shall be readily available for reference and inspection purposes. This emergency plan shall include a means and procedure to alert all occupants of an emergency.”

(56) *NFPA 101, 16.7.4.1 and 17.7.4.1*. Add the following exception:

“Exception: Day-Care Homes.”

(57) *NFPA 101, 16.7.5 and 17.7.5*. Add the following exception:

“Exception: Day-Care Homes with not more than three clients for overnight lodging.”

(58) *NFPA 101, 20.3.5.1*. Renumber the existing sections 20.3.5.1 through 20.3.5.3 to 20.3.5.2 through 20.3.5.4 respectively, and add a new subsection 20.3.5.1 to read as follows:

“Buildings containing new ambulatory health care occupancies located above or below the level of exit discharge shall be protected throughout by approved automatic sprinkler systems.”

(59) *NFPA 101, 24.1.1.1*. Place a period after the word "dwellings" and replace the remainder of the sentence with the following:

“One- and two-family dwellings include:

- (a) A building containing not more than two dwelling units in which each dwelling unit is occupied by members of a single family with not more than five outsiders, if any, accommodated in rented rooms.
- (b) A living unit for five or fewer individuals with disabilities as defined in (d) of this section.
- (c) A living unit for six to eight individuals with disabilities as defined in (d) of this section, in addition to live-in staff, if specific information is presented to the authority having jurisdiction that the residents of the living unit have no unique and specific needs which warrant imposition of the fire safety standards required by either Chapter 26, 32 or 33 of the NFPA 101 Life Safety Code, (2006 Edition).
- (d) For the purposes of application of this section, “Individuals with disabilities” shall mean those individuals who have a disability as defined in the Fair Housing Amendment Act of 1988, 42 U.S.C. §3601 et seq. as follows:
  - (1) A physical or mental impairment which substantially limits one or more of the person’s major life activities;
  - (2) A record of having such an impairment; or
  - (3) Being regarded as having such an impairment, but this term does not include current, illegal use of or addiction to a controlled substance (as defined in 21 U.S.C. § 802).”

(60) *NFPA 101, 24.2.2.3.3.* After the phrase “5.7 ft<sup>2</sup> (0.53 m<sup>2</sup>)” insert the phrase “or not less than 5.0 ft<sup>2</sup> when at grade”.

(61) *NFPA 101, 24.2.5.1.* Add the following exception:

“Exception: Maximum riser heights of 8¼ inches (210mm) and minimum tread depths of 9 inches (229mm) are permitted for stairs in new construction. A nosing not less than ¾ inch (19mm) but not more than 1¼ inches (32mm) shall be provided on stairs with solid risers where the tread depth is less than 11 inches (279mm).”

(62) *NFPA 101, 24.3.4.1(1).* Delete all text after the word “rooms”

(63) *NFPA 101, 24.3.4.4 and 26.3.4.6.* Add new subsections to read as follows:

“In new construction, carbon monoxide alarms shall be installed in accordance 9.6.2.11.”

(64) *NFPA 101, 28.3.4.3.5.* Delete all text after the word “provided”.

(65) *NFPA 101, 28.3.4.6.* Add new subsection 28.3.4.6 to read as follows:

“28.3.4.6 Carbon monoxide alarms shall be installed in accordance 9.6.2.11.”

(66) *NFPA 101, 29.3.4.5.2, 30.3.4.3.3, and 30.3.4.3.4.* Delete.

(67) *NFPA 101, 30.3.4.6.* Add new subsection 30.3.4.6 to read as follows:

“30.3.4.6 Carbon monoxide alarms shall be installed in accordance 9.6.2.11.”



- (68) *NFPA 101, 31.3.4.5.1*. Before the word “outside”, insert the phrase “inside each sleeping area.”.
- (69) *NFPA 101, 31.3.4.5.2*. At the end of the sentence, add the phrase “only in sleeping rooms that were not required to have smoke alarms powered by the building electrical system when the building was constructed.”
- (70) *NFPA 101, 32.2.2.3.1(3) and 33.2.2.3.1(3)*. After the phrase “5.7 ft<sup>2</sup> (0.53 m<sup>2</sup>)” insert the phrase “or not less than 5.0 ft<sup>2</sup> when at grade”.
- (71) *NFPA 101, 32.2.3.4.4*. Add new subsection 32.2.3.4.4 to read as follows:  
“32.2.3.4.4 Carbon monoxide alarms shall be installed in accordance 9.6.2.11.”
- (72) *NFPA 101, 32.3.1.3*. Delete all text after the word “with” and replace with “Section 33.3.1.3 and the City of Gaithersburg Building Code.”
- (73) *NFPA 101, 32.3.3.4.9*. Add new subsection 32.3.3.4.9 to read as follows:  
“32.3.3.4.9 Carbon Monoxide Alarms. Carbon monoxide alarms shall be installed in accordance 9.6.2.11.”
- (74) *NFPA 101, 33.2.3.4.3.5 and 33.3.3.4.7.1*. After the word “system”, insert the phrase “and have secondary battery backup”.
- (75) *NFPA 101, 36.1.2.3 and 37.1.2.3*. Add new subsections 36.1.2.3 and 37.1.2.3 to read as follows:  
“Structures that are predominately residential dwellings, and that include mercantile occupancy open to the public, shall have separation constructed in accordance with 8.4 between the occupancies. Openings in the separating assemblies shall be constructed in accordance with 8.3.4.”
- (76) *NFPA 101, 36.3.4.1 and 37.3.4.1*. After the word “occupancies”, insert the phrase “and multiple story Class B mercantile occupancies”.
- (77) *NFPA 101, 36.4.4.4.3.1(3)*. Delete
- (78) *NFPA 101, 38.1.2.3 and 39.1.2.3*. Add new subsections 38.1.2.3 and 39.1.2.3 to read as follows:  
“Structures that are predominately residential dwellings, and that include business occupancy open to the public, shall have separation constructed in accordance with 8.4 between the occupancies. Openings in the separating assemblies shall be constructed in accordance with 8.3.4.”
- (79) *NFPA 101, 38.3.4.3(2) and 39.3.4.3(2)*. Delete existing wording and replace with the following: “It shall sound a fire alarm signal in a constantly attended location and it shall transmit a fire alarm signal to a listed central station.”

(80) *NFPA 101, 39.2.2.2.3.* Delete

(81) *NFPA 101, 39.2.4.2(6).* Add new subsection 39.2.4.2(6) to read as follows:

“(6) Any two-story business occupancy building not exceeding 3000 square feet gross floor area per floor shall be permitted to have a single exit via an approved outside stairway, or a single totally enclosed interior stairway to the second floor having discharge directly to the exterior of the building, if the total travel distance to the outside of the building does not exceed 100 feet, the travel distance to the interior stairway does not exceed 75 feet, and such interior stairway does not communicate with any other floor.

Exception to (6): An interior single exit stairway shall be permitted to be arranged as a floor communicating stair, with one-hour rated fire doors at the entrances to each level if it is protected as follows: The building shall be provided with A/C hard-wired smoke detection in accordance with NFPA 72 arranged to sound an audible alarm throughout each level, and the stairway shall be provided with approved automatic sprinkler protection, installed in accordance with NFPA 13, with sprinklers located at the top of the stair and over each landing and on the tenant side of each interior fire door opening into the stairway.”

(82) *NFPA 101, 40.3.4.3.1, 42.3.4.3.1 and 42.8.3.4.3.1.* Delete the text after the word “meet” and replace with “Section 9.6.3 as amended”.

(83) *NFPA 101, 42.8.2.2.3.1.* Add the following: “Stairs complying with 7.2.2.5.1 are not required in open parking structures.”

(84) *NFPA 101, 42.8.2.2.9.* Add the following: “The two accessible rooms or spaces separated from each other by smoke-resistant construction in accordance with the definition of ‘area of refuge’ in 3.3.18 shall not be required in open parking structures.”

(85) *NFPA 101, 42.8.2.6.* Add the following: “In open parking structures travel distance is permitted to be measured to the closest riser of an open stair providing means of egress to the exterior of the building.”

## **Sec. 11-17. Amendments and Modifications to the NFPA Codes Governing Fire Protection Systems.**

The *Standard for the Installations of Sprinkler Systems* (NFPA 13), 2002 edition, the *Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes* (NFPA 13D), 2002 edition, the *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height* (NFPA 13R), 2002 edition, the *Standard for the Installation of Standpipe and Hose Systems* (NFPA 14), 2003 edition, the *Standard for the Installation of Stationary Pumps for Fire Protection* (NFPA 20), 2003 edition, the *National Fire Alarm Code®* (NFPA 72®), 2002 edition, the *Recommended Practice for Smoke*

*Control Systems* (NFPA 92A), 2000 edition, and the *Guide for Smoke Management Systems in Malls, Atria and Large Areas* (NFPA 92B), 2002 edition are modified as follows:

- (1) *NFPA 13, 8.1.1(7)*, Add new paragraph (7) as follows:  
“(7) Sprinklers are required in attached balconies or porches unless at least 50 percent of the longest exterior side is open to the atmosphere.”
- (2) *NFPA 13, 8.4.5.1*, Add the following: “Listed residential sprinkler heads shall be used in dwelling units except Detention and Correctional occupancies.”
- (3) *NFPA 13, 8.14.7.4*, Add the following: “This includes canopies and roofs over areas with vehicle access except those over drive-up windows.”
- (4) *NFPA 13, 8.14.10.3* (sprinkler exemption in electrical equipment rooms) Delete.
- (5) *NFPA 13, 8.14.13*. Add the following: “New drop-out ceilings are prohibited.”
- (6) *NFPA 13, 8.14.19.1*. After the word “ceiling” add “and in any speculative areas subject to tenant changes”.
- (7) *NFPA 13, 8.14.19.2*. Delete all text after the word “bushings” and replace with “for hydrostatic testing only, and shall be removed prior to the occupancy of the space.”
- (8) *NFPA 13, 8.15.1.1.1 and 8.16.1.1*. Add the following: “When a sprinkler system serves more than one level, each level shall be consistently and separately valved by a listed and approved control valve. In addition, where a sprinkler system is required to activate a local building fire alarm system, the sprinkler system shall have a separate and distinct water flow detecting device for each floor and zone.

Exception 1: In buildings not exceeding three floors and 3000 square feet per floor.

Exception 2: Unoccupied and unused attics may be zoned with the level below.

Exception 3: Mezzanines not exceeding 3000 square feet in area.

Exception 4: Detention and correctional facilities.”

- (9) *NFPA 13, 8.16.2.1*. Add the following: “and shall meet the following requirements:
  - (a) Shall be located within 100 feet from a free standing (not wall type) hydrant
  - (b) Shall be positioned between 18 and 48 inches from grade to the centerline of the inlets.
  - (c) Number of 2 ½ in. inlets:

<u>System Demand (gpm)</u>	<u>No. of inlets</u>
Up to 749	2
750-999	3
1000 and above	4

- (d) Multiple connections for the same building shall be interconnected.
  - (e) Shall be sized at least as large as the main sprinkler system riser pipe or the fire pump discharge line, whichever is larger.”
- (10) *NFPA 13, 11.1*. Add the following: “Calculations for new systems or new proportions of systems shall meet the following criteria:
- (a) Highest hazard and most demanding use allowed by building construction permit or property zoning.
  - (b) Storage use: Available storage height and configuration which produces the greatest demand.
  - (c) Laboratory use: ordinary group 2 for class A, B, or C labs.
  - (d) All uses: 20% safety factor. For systems without a pump, the safety factor is based on the demand pressure only at the supply point. For systems with a pump, the safety factor is based on both the demand pressure and demand flow at the pump discharge. All design options, except grids, shall be explored. Owner occupied buildings may use a lower safety factor if a pump would be necessary to achieve the 20%.”
- (11) *NFPA 13, 11.2.3.5.1*. Add the following: “Where sprinklers are installed on ceilings that are not smooth, flat, and level, sprinklers listed for the ceiling configuration shall be used. If there are no sprinklers listed for the proposed ceiling configuration, then the number of design sprinklers calculated shall be at least five.”
- (12) *NFPA 13, 15.1.2*. Add the following: “Pressure and flow availability as determined by a public utility shall be used for new taps. Pressure and flow availability for existing taps shall be determined by interior flow test. In any case, the supply information shall be corrected for the low hydraulic gradient. Booster pumps and pump/tank supplies shall be used only be used where it is demonstrated that the public water supply is inadequate.”
- (13) *NFPA 13D, 5.1.4*: Add new 5.1.4 to read as follows:
- “5.1.4 Where a dedicated sprinkler booster pump is provided the following conditions shall be met:
- (1) Pump shall not sit directly on concrete.
  - (2) Pump shall be powered from the house electrical service by a nominal 220-240 circuit in accordance with the City of Gaithersburg Electrical Code.
  - (3) Pump shall be connected to a run timer that will keep the pump running for at least 5 minutes when the pump is started for any reason.”
- (14) *NFPA 13D, 6.2(5)*: Add new subsection (5) to read as follows:
- “(5) A well pump shall have sufficient capacity and pressure to meet the sprinkler system demand. The stored water capacity of sections 6.1.2 and 6.1.3 shall be permitted to be a combination of the water on the well (including the refill rate) plus the water in the holding tank if such can supply the sprinkler system.”
- (15) *NFPA 13D, 6.2.1*. Add new 6.2.1 to read as follows:

“6.2.1 Where a water storage tank(s) is provided the following conditions shall be met:

(1) Tank shall be provided with an automatic filling valve.

(2) The water level in the tank shall be visible without having to open the tank.”

(16) *NFPA 13D*, 6.2.2. Add the following: “Pressure and flow availability as determined by a public utility shall be used and shall be adjusted to the low hydraulic gradient. Booster pumps and pump/tank supplies may only be used where it is demonstrated that the public water supply is inadequate.”

(17) *NFPA 13D*, 7.1.2. After the word “unless”, insert the phrase “fed by a tank and”

(18) *NFPA 13D*, 7.2.1. Add the following: “Drain shall be downstream of any pump.”

(19) *NFPA 13D*, 7.5.3 and 8.3.2 (3): Delete the word “standard” and delete the phrase “not intended for living purposes” and add a second sentence to read: “Sprinklers shall be quick response type.”

(20) *NFPA 13D*, 7.5.5.1. Add the following: “Where possible to maintain listed coverage, sprinkler heads shall be positioned so as to eliminate the need to install sprinkler heads of a higher temperature rating.”

(21) *NFPA 13D*, 8.1.2. Add the following: “Where sprinklers are installed on ceilings that are not smooth, flat, and level, sprinklers listed for the ceiling configuration shall be used. If there are no sprinklers listed for the proposed ceiling configuration, then the number of design sprinklers calculated shall be at least three.”

(22) *NFPA 13D*, 8.2.4. Delete the text and replace with the following:

“Obstructions.

(a) Sprinklers shall be positioned so that response time and discharge are not adversely affected by features such as sloped ceilings, beams, lights, and fan motors.

(b) Unprotected bulkheads or soffits behind the spray of sidewall sprinklers shall not exceed 8 inches in width.

(c) Sprinkler heads in closets shall not be located directly above shelves.”

(23) *NFPA 13D*, 8.4. Add the following: “All calculations shall include at least 10% safety factor to account for minor field changes, unless a booster pump is necessary to obtain this safety factor.”

(24) *NFPA 13R*, 6.5.3. Add the following: “Pressure and volume availability as determined by a public utility shall be used and shall be adjusted to the low hydraulic gradient. Booster pumps and pump/tank supplies may only be used where it is demonstrated that the public water supply is inadequate.”

(25) *NFPA 13R, 6.6.4.1.* Delete text and replace with the following: “A single 2 ½ inch fire department connection with a feed line sized at least as large as the main system riser shall be provided when the system has 20 or more sprinklers. The fire department connection shall be located on a street front and shall be mounted such that it is 18 to 48 inches from the centerline of the inlet to finished grade.”

(26) *NFPA 13R, 6.6.4.2.* Delete.

(27) *NFPA 13R, 6.7.1.2.* Add the following: “Where sprinklers are installed on ceilings that are not smooth, flat, and level, sprinklers listed for the ceiling configuration shall be used. If there are no sprinklers listed for the proposed ceiling configuration, then the number of design sprinklers calculated shall be at least five.”

(28) *NFPA 13R, 6.7.1.5.3.* Delete the text and replace with the following:  
“Obstructions.

(a) Sprinklers shall be positioned so that response time and discharge are not adversely affected by features such as sloped ceilings, beams, lights, and fan motors.

(b) Unprotected bulkheads or soffits behind the spray of side wall sprinklers shall not exceed 8 inches in width.

(c) Sprinkler heads in closets shall not be located directly above shelves.”

(29) *NFPA 13R, 6.7.4.* Add the following: “All calculations shall include at least a 10% safety factor to account for minor field changes, unless a booster pump is necessary to obtain this safety factor.”

(30) *NFPA 14, 4.7.2.* Delete text and replace with the following: “Each fire hose valve shall be 2½-inch in size and provided with 2½-inch to 1½-inch reducers, caps and chains.”

(31) *NFPA 14, 5.1.2.* Add the following:

“(1) Standpipe systems in unheated areas shall be automatic dry type.

(2) Standpipe systems in detached open parking garages may be manual dry type, if the piping is air supervised for breaks or open valves.

(3) All other standpipe systems shall be automatic wet type.

(4) Occupant use hose is prohibited in new or existing buildings.

(5) New standpipe systems shall be Class 1 only.”

(32) *NFPA 14, 6.3.* Add the following:

“(1) Shall be located within 100 feet from a free standing (not wall type) hydrant.

(2) Number of 2 ½ in. inlets:

<u>System Demand (gpm)</u>	<u>No. of inlets</u>
Up to 749	2
750-999	3
1,000 and above	4

- (3) Multiple connections on the same building shall be interconnected.
- (4) When a section of a building is fed by a connection (i.e., partial systems), permanent all weather identification signs shall be provided on connections.”

(33) *NFPA 14, 7.3.2.3.* Add the following:

- “(1) Measurement shall be parallel or at right angles to walls.
- (2) Measurement in parking areas shall be around all designated parking spaces.
- (3) Supplemental hose valves outside the stairs shall not be located within tenant spaces, unless hose reach requirements cannot be met by placement of valves in public corridors or by use of wall hydrants for spaces opening to the exterior. Hose valve locations shall be marked by the placement of signs, the striping of columns, or other approved methods.”

(34) *NFPA 14, 7.8.1.1,* Add the following exceptions:

“Exception 1: In high-rise buildings, where booster pumps are necessary to produce the required residual pressures, pumps and piping systems shall be sized to provide for the demand of the hydraulically most remote hose station, or the sprinkler system demand, whichever is greater. The standpipe system shall also be sized to provide the required flow and pressure for all hose stations required to be flowing, when supplied by 150 psi at the fire department connection(s). Two sets of calculations will, therefore, be required under this exception.

Exception 2: Systems in buildings that are not high-rise, and dry systems with no automatic water supply, may be sized to obtain the required flows and pressures when supplied by 150 psi at the fire department connection(s).

Exception 3: In existing buildings, after shell occupancy, hose valves added to correct reach violations created by tenant modifications may be supplied by 3 inch pipe without recalculation.”

(35) *NFPA 20, 5.12.1.* Add the following: “Fire pump installations, including the pump, driver, or controller, shall not be permitted to be installed in below-ground areas such as vaults or pits unless specifically allowed by the City of Gaithersburg Fire Marshal.”

(36) *NFPA 20, 5.14.6.4.* Add the following: “Eccentric reducers shall be installed with the flat side on the bottom when fed from above.”

(37) *NFPA 20, 5.18.1.2.* Add the following: “A relief may be installed to reduce operating pressure below 175 psi at high gradient.”

- (38) *NFPA 20, 5.18.7.* Delete text and replace with: “Relief valves shall not be piped back into the source of the supply.”
- (39) *NFPA 72, 4.4.6.1.* Add the following: “An annunciator with the following features is required when the building is greater than one story, over 22,500 square feet in area per floor, or has more than one type of alarm initiating device:
- (a) Annunciator shall have a visible signal for each different floor, zone, and device type. Floor designations shall match those used in elevators and stairways.
  - (b) Zones shall not exceed a single floor, 22,500 square feet, or 300 linear feet. Sprinkler systems may be zoned in accordance with the applicable sprinkler standard.
  - (c) If two or more zones per floor are required, a graphic outline on or adjacent to the annunciator shall be provided showing the building address, building outline, exterior entrances, zone boundaries, “you are here” notation, north compass arrow, all stairways, stairway identification, the floors served by each stairway, stairways that have roof access, all elevators, elevator identification, the floors served by each elevator, elevator machine rooms, main utility shutoffs, fire alarm control panel, fire pump, all standpipe risers, and fire department connections.
  - (d) A lamp type annunciator shall have a lamp test switch unless the annunciator circuits are supervised.
  - (e) The annunciator shall be located at, and visible from, the main fire department entrance, or other location approved by Montgomery County Fire and Rescue Service.
  - (f) If two or more buildings are controlled by one alarm system, an annunciator shall be installed in each building with a pilot lamp indicating the building of alarm origination.”
- (40) *NFPA 72, 5.7.1.7.* Add the following: “Detectors located at the top of shafts and stairs shall sound a supervisory signal only unless a confirmation or verification feature is provided to minimize unwanted alarms. The location shall be identified at the annunciator or fire alarm control panel.”
- (41) *NFPA 72, 5.7.1.8.* Add the following: “Environments not suitable for smoke detectors shall use rate of rise or rate compensated detectors.”
- (42) *NFPA 72, 5.7.4.2.2.* Add the following: “Activation of duct smoke detectors shall sound an audible signal in a normally occupied area or through the building fire alarm system, and shall be identified as duct detector. If connected to the building alarm system, the signal shall be supervisory only and shall not initiate the building evacuation alarm unless a confirmation or verification feature is provided to minimize unwanted alarms.”
- (43) *NFPA 72, 5.10.2.* Add the following: “Standpipe or main water flow indicators, if provided, shall sound a supervisory signal only.”
- (44) *NFPA 72, 5.12.4.* Change the second sentence to read: “The center of each station shall be between 42 and 48 inches above the floor level.” and add the following: “Approved ‘911’ instruction signs shall be permanently affixed and maintained at each manual fire alarm station, unless the fire alarm is monitored by a UL listed central station.”



- (45) *NFPA 72, 6.8.5.4.5.* After the word “notification”, insert the phrase “or activation of a required extinguishing system.”
- (46) *NFPA 72, 6.9.9.14.* Delete the text and replace with the following: “At least six handsets shall be provided in the fire command center.”
- (47) *NFPA 72, 7.4.2.1.* Add the following: “and with intervening doors closed”.
- (48) *NFPA 72, 11.5.1.1(1), 11.5.2.1 and 11.5.4.1.* Delete the exceptions.
- (49) *NFPA 72, 11.5.6.1(4).* Delete.
- (50) *NFPA 72, 11.5.12.1.* Delete the exceptions.
- (51) *NFPA 72, 11.8.3.5(10), 11.8.3.5(11) and 11.8.3.5(12).* Add new subsections (10), (11) and (12) to read as follows:
- “(10) Smoke detectors shall be arranged such that smoke from areas other than bathrooms or clothes/linen closets cannot bypass the detector before spreading to any sleeping room or area.
- (11) Entrances to sleeping rooms shall be protected by properly placed smoke alarms unless the door leads only to a bathroom or clothes/linen closet.
- (12) Enclosed rooms such as dens, libraries, studies, or sitting rooms which could be used as a temporary sleeping area shall be treated as bedrooms.”
- (52) *NFPA 92A, 7.1(3) and NFPA 92B, 9.1(3).* Add new subsection (3) to read as follows:
- “(3) System shop drawings for submittal to the AHJ.”
- (53) *NFPA 92A, 7.1.3, and NFPA 92B, 9.4.* Add new subsections to read as follows:
- “Shop Drawing Submittals. Shop drawings shall be prepared and submitted to the City of Gaithersburg for review and a Fire Protection Permit shall be obtained prior to beginning installation. Shop drawings shall include the following information:
- a. Plans and specifications
  - b. Engineering calculations and/or computer model
  - c. Floor plans
  - d. System diagram and details
  - e. Sequence of operations and control layout
  - f. Preliminary test procedures
  - g. Acceptance test procedures
  - h. Pass/fail criteria”

**Sec. 11-18. Severability.**

Should any provision or section of this Chapter 11 be held to be invalid, it is intended that the remaining provisions and sections of this chapter shall not be affected and shall continue to apply.

ADOPTED by the City Council of Gaithersburg this 18<sup>th</sup> day of June, 2007.

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SIDNEY A. KATZ, MAYOR and  
President of the Council

DELIVERED to the Mayor of the City of Gaithersburg this 18<sup>th</sup> day of June, 2007.  
APPROVED by the Mayor of the City of Gaithersburg this 18<sup>th</sup> day of June, 2007.

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SIDNEY A. KATZ, MAYOR

THIS IS TO CERTIFY that the foregoing Ordinance was adopted by the City Council of Gaithersburg, in public meeting assembled, on the 18<sup>th</sup> day of June 2007. This Ordinance will become effective on the 9<sup>th</sup> day of July, 2007.

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David B. Humpton, City Manager